

Applicant : Imad Mahawili, Ph.D
Serial No. : 10/047,287
Page : 2

IN THE CLAIMS:

Please cancel Claims 3-16, 18, 19, 21-33, 51-60, and 62-74.

1-74. (cancelled)

75. (previously presented) A semiconductor processing apparatus comprising:

a processing chamber adapted to support a semiconductor substrate therein;

a first energy source adapted for applying a first energy to a non-device side of the semiconductor substrate to heat the non-device side of the substrate to a reference temperature;

a second energy source adapted for applying a second energy to a device side of the semiconductor substrate to heat the device side to a heat activation temperature, said second energy source applying said second energy for an activation period sufficient to activate impurities in the substrate so that they become part of the lattice structure of the substrate while minimizing diffusion of the impurities across the substrate, and said reference temperature being less than said heat activation temperature to reduce the temperature gradient in the substrate to minimize stress in the substrate; and

a filter, said filter absorbing energy from said second energy source having a wavelength greater than about 0.9 microns.

76. (previously presented) The semiconductor processing apparatus according to Claim 75, said filter absorbing energy from said second energy source having a wavelength greater than about 0.7 microns.

77. (previously presented) The semiconductor processing apparatus according to Claim 75, wherein said filter comprises a fluid cooled filter.